

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-5 canceled.

Claim 6. (Currently amended) ~~The~~ A chemiluminescent light producing device in accordance with ~~claim 5~~ claim 10 wherein:

said ~~biodegradable~~ outer containment device is constructed from at least one polymeric material selected from the group consisting of Polyglycolic Acid, Polyactic Acid, Polycaprolactone, Polyhydroxybutyrate, Polyhydroxyvalerate, Polyvinyl Alcohol, Polyvinyl Acetate, and Polyenlketone.

Claim 7. (Currently amended) ~~The~~ A chemiluminescent light producing device in accordance with ~~claim 5~~ claim 6 wherein:

said chemiluminescent light producing chemical system retained therein is biodegradable.

Claim 8. (Currently amended) A process for selecting a biodegradable chemiluminescent light producing system including a chemical light oxalate system and a chemical light activator system

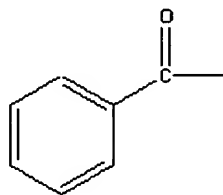
comprising:

first selecting an oxalate solvent in accordance with the following criteria;

select a general set of solvent parameters required to impart particular biodegradable characteristics ;

select a class of solvents that meet said parameters;

specify members of said class of solvents that contain a carboxy-phenyl group:



group the members in order of water miscibility;

select the member of said group that will optimize the solubility of active chemical light ingredients ;

produce blends having different combinations of said active chemical light ingredients;

optimize said combination of solvents and active chemical light ingredients empirically as a function of differing absorption of different colors of light by different solvents;

secondly, select an activator solvent in accordance with the

following criteria;

return to the class of solvents chosen above;

from this class of solvents, find all members that have a miscibility in water effective to stabilize a peroxide component of said chemical light activator system; and

blend activator components in said solvent having a miscibility effective to stabilize said peroxide component;

whereby visible light is emitted from said oxalate system and said peroxide system upon admixture and said admixture being consumable by natural bacteria in a reasonable amount of time such that a biodegradable chemiluminescent light producing system is defined.

Claim 9. (Currently amended) A biodegradable chemiluminescent light producing system produced in accordance with the process of claim 8 wherein a 50/50 mixture of propylene glycol dibenzoate and acetyltributyl citrate is selected as said oxalate solvent.

Claim 10. (New) A chemiluminescent light producing device comprising a polymeric composition exhibiting an accelerated rate of decomposition, said polymeric composition forming an outer

containment device enclosing at least one inner frangible vial, said outer containment device and said vial containing a chemical system, said outer containment device and said vial each containing one of an oxalate component and a peroxide component of said chemical system, separately, said oxalate component and said peroxide component producing visible light when intermixed in said polymeric outer containment device, said polymeric composition formed from a water soluble starch/polyolefin combination whereby said starch disintegrates when placed in a body of water.

Claim 11. (New) In a chemiluminescent containment device of claim 10 wherein said polymeric outer containment device is photodegradable and formed by including UV sensitive components selected from the group consisting of carbonyl groups or metal salts.

Claim 12. (New) In a chemiluminescent containment device of claim 7 wherein said chemical system comprises approximately 8.4% CPPO, 0.19% BPEA and 91.41% of a 50/50% mixture of propylene glycol dibenzoate and acetyltributyl citrate in said oxalate component and a mixture of approximately 85% triethyl citrate, 10% t-butanol, 5% of a 70% concentration hydrogen peroxide, and 0.0085% sodium salicylate in said peroxide component.